SV2-617B

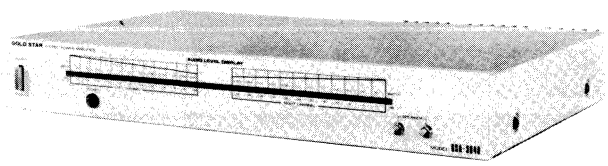
SV2-617B

Gold Star Audio

SERVICE MANUAL

for

service technician



Gold Star Co., Ltd.

STEREO POWER AMPLIFIER

GSA-3040

Slim type component series

SPECIFICATIONS

This specifications may be changed for improvement of performance without notice.

Output	RMS 25W
T.H.D. (20-20000 Hz)	0.02%
Frequency response	20-20000 Hz
Signal to noise ratio	75 dB
Noise	0.4 mV
Power indicator range	0.002-50W
Input sensitivity/impedance	
RCA jacks	500 mV/47kΩ
DIN socket	500 mV/47kΩ
Load impedance	8 ohm
Semi-conductors	3IC, 4TR, 8DIODE, 24 LED
Power consumption	130 W (Max.)
Weight	5.2 Kg
Dimensions	420(W) x 55(H) x 269(D) mm

Printed in Korea Apr., 1982

EXPLODED VIEW FOR CABINET

To service technician

This service manual contains detailed service information for stereo power amplifier, Model GSA-3040
Illustration of the model appears on front cover.
Please give attention to next caution.
The followings are the safety servicing guidelines for all audio amplifiers and radio receivers.
Service work should be performed only after you are familiar with all of the following safety guide.
To do otherwise increase the risk of potential hazards and injury to the user.

Safety guide

1. Be sure that all components are positioned in such a way to avoid possibility of adjacent components shorts.
   This is especially important on those chassis which are transported to and from the repair shop.
2. Always replace all protective devices such as insulators and barriers after working on a receiver.
3. Check for frayed insulation on wires including the AC cord. Also check across the-line components for damage and replace if necessary.
4. All fuses and certain resistors and capacitors which are of the flameproof type must be replaced with exact same types to prevent potential fire hazard.
5. After re-assembly of the set always perform an AC-leakage test on the exposed metallic parts of the cabinet such as the knobs, switch, etc. to be sure the set is safe to operate without danger of electrical shock.

To order repair parts

Parts orders must contain:

1. Model Number-found on front cover in this service manual.
2. Part Number, Description and Quantity.

CONTENTS

Disassembly instructions 2
Power level adjustment 2
Block diagram 3
Schematic diagram 4, 5
Electrical parts location and wiring 6, 7
Electrical parts list 8,-9
Exploded view for cabinet 10, 11
Parts list for cabinet exploded view 12

DISASSEMBLY INSTRUCTIONS

1. To remove top cabinet

Remove four screws Ⓐ as shown in Fig. 1.

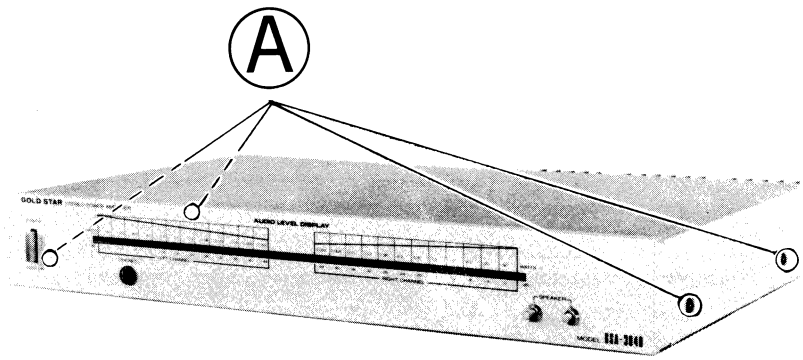


Fig. 1

2. To remove front panel

When replacing parts situated on the front panel such as the power switch, speaker buttons, etc., remove six screws Ⓑ and Ⓒ . (See Fig. 2 & 3)

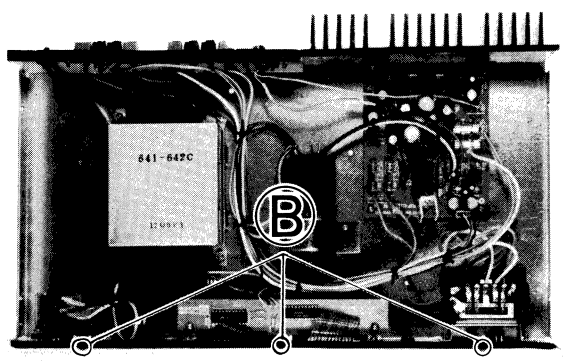


Fig. 2

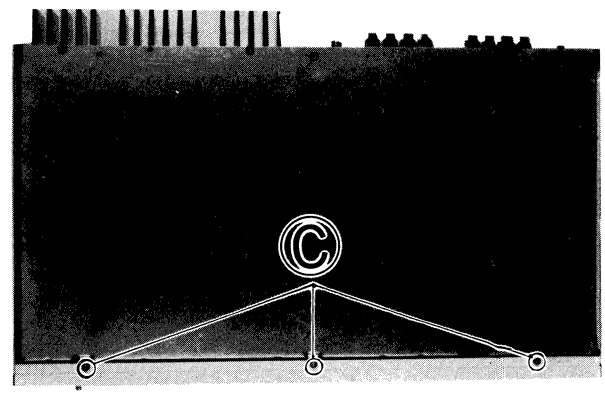
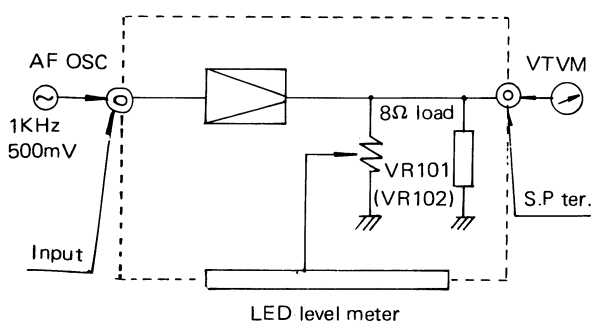


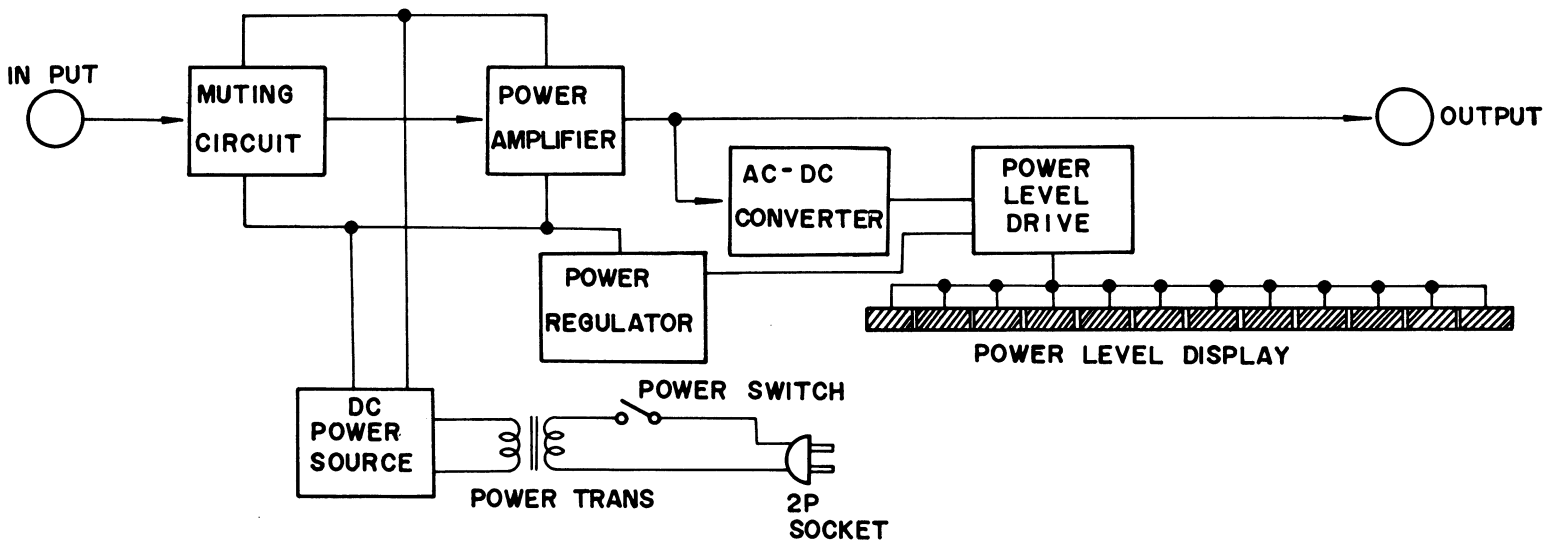
Fig. 3

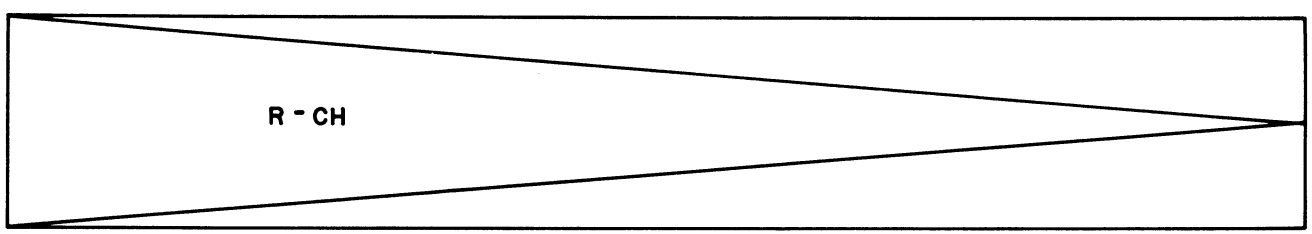
POWER LEVEL ADJUSTMENT

This stereo power amplifier has been aligned at the factory and normally will not require further adjustment. As a result, it is not recommended that any attempt is made to modificate any circuit. If any parts are replaced or if anyone tampers with the adjustments, realignment may be necessary.



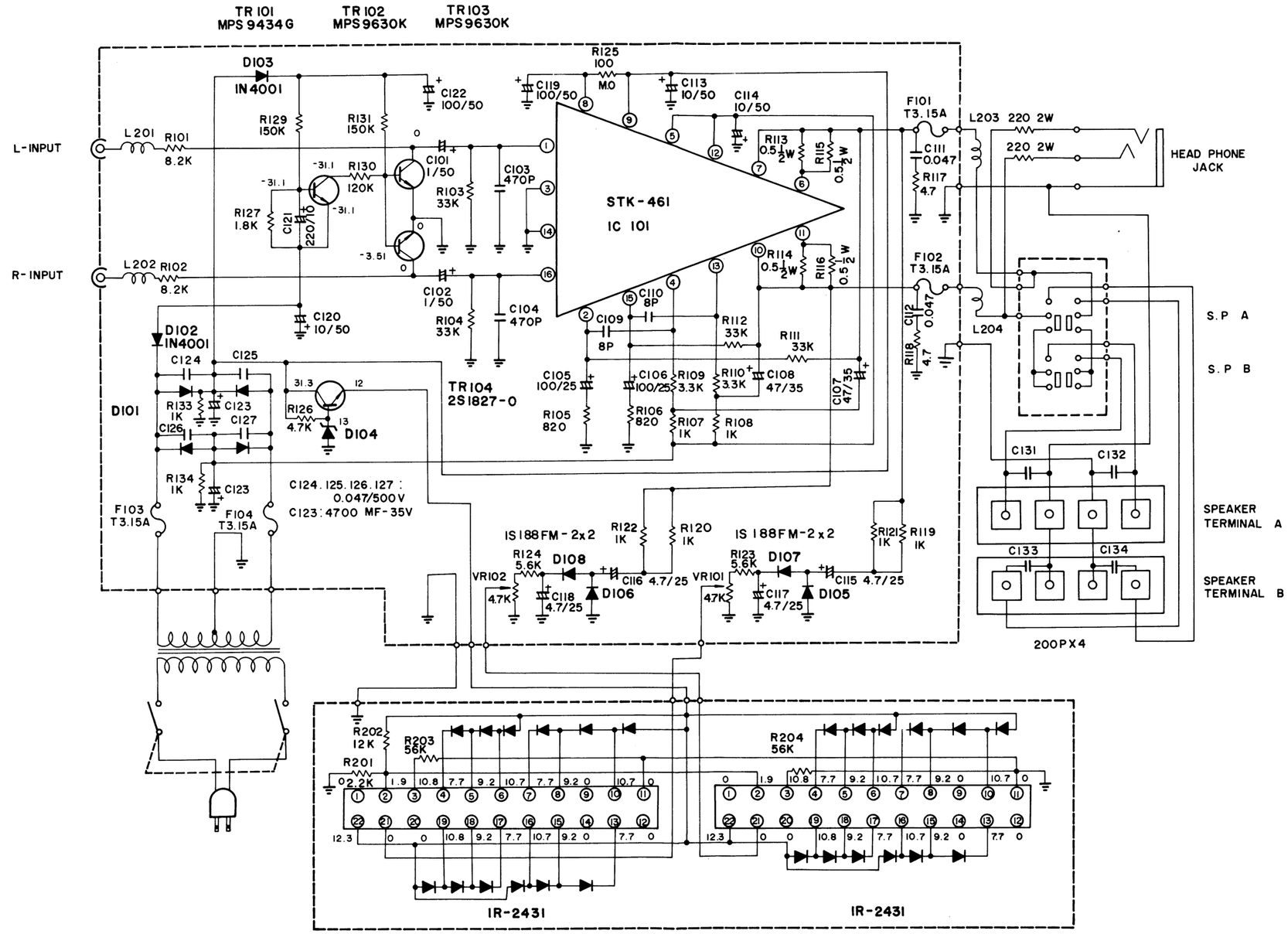
No.	Input	Adjust for	Adjustment	Remarks
1	1 kHz 500mV	More than 14.2V	–	–
2	1 kHz 500mV-20dBm	2V	AF OSC output	–
3	"	–	VR101(L) VR102(R)	LED level meter should read 0.5W





BLOCK DIAGRAM

SCHEMATIC DIAGRAM

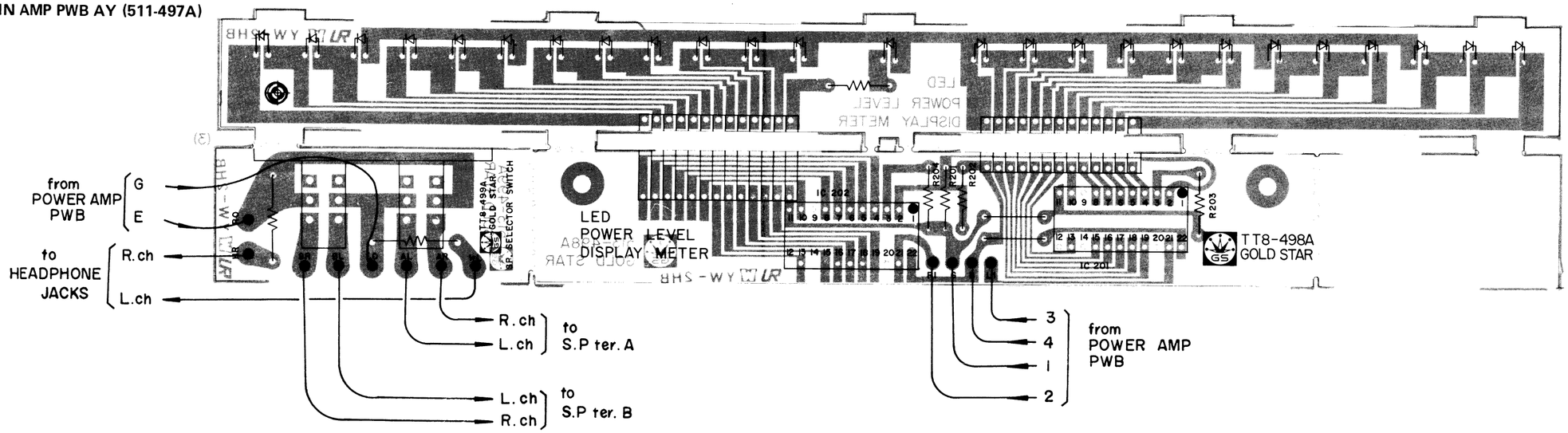


THIS SCHEMATIC DIAGRAM MAY BE CHANGED FOR IMPROVEMENT OF PERFORMANCE WITHOUT NOTICE.

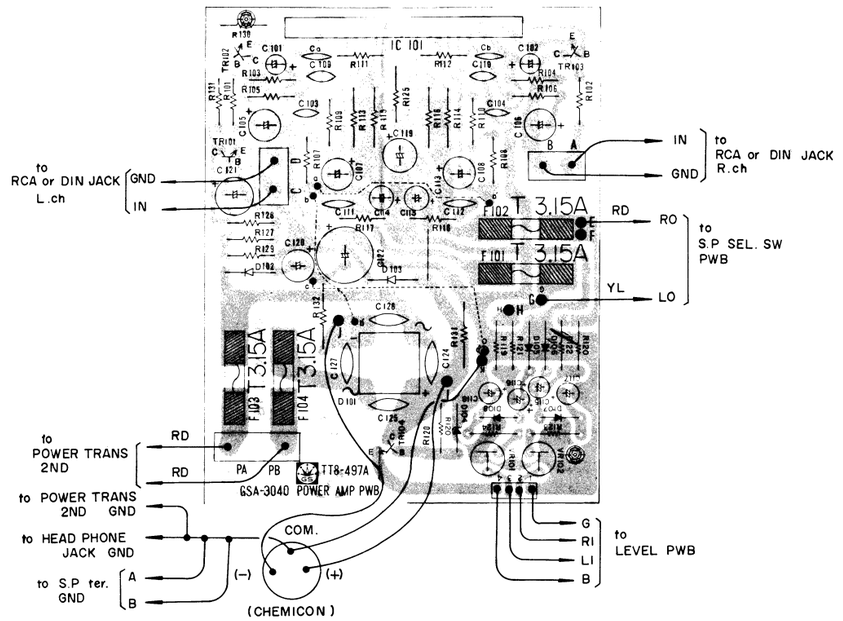
ELECTRICAL PARTS LOCATION AND WIRING

Circuity pattern and printing may be made a little of difference with the set under service. Please make sure of them when servicing.

MAIN AMP PWB AY (511-497A)



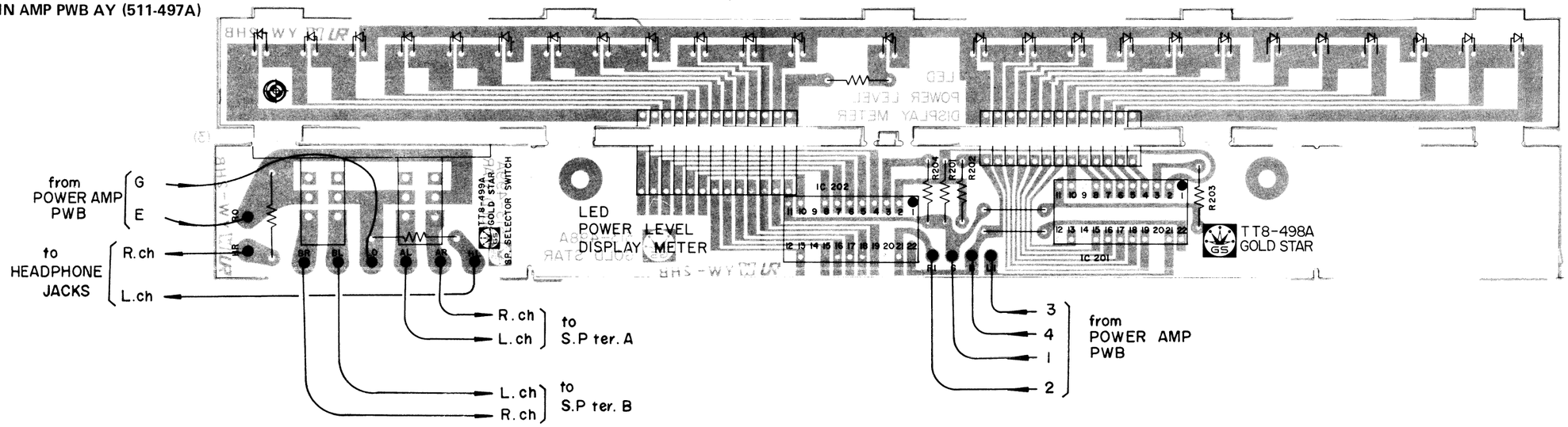
LEVEL METER PWB AY (511-498A)



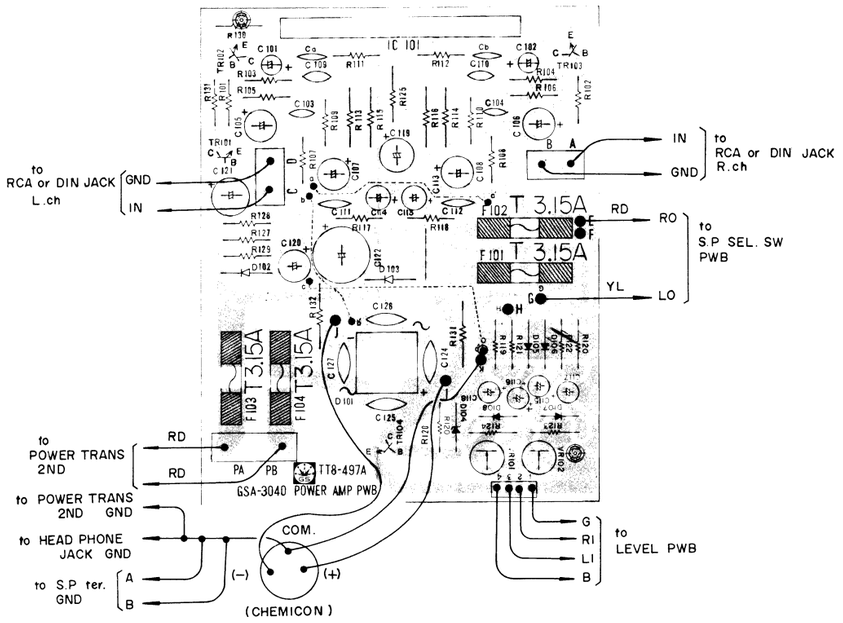
ELECTRICAL PARTS LOCATION AND WIRING

Circuity pattern and printing may be made a little of difference with the set under service. Please make sure of them when servicing.

MAIN AMP PWB AY (511-497A)



LEVEL METER PWB AY (511-498A)



ELECTRICAL PARTS LIST

MAIN AMP PWB AY (511-497A)

NO.	SYMBOL NO.	PART NO.	DESCRIPTION
1	IC101	668-134A	IC STK-463 (AUDIO)
2	TR104	665-882B	TRANSISTOR SANKEN 2SC1827-0
3	D101	652-611A	DIODE RECT KBRC604 G, I
4	D104	654-607B	DIODE, ZENER, ZPD-13, ITT
5	D105, 106, 107 108	651-001C	DIODE DETECT 1S188FM-2
6		586-101A	FUSE HOLDER KS CLIP TYPE 5x20
7	F101, 102, 103 104	585-116B	FUSE 5x20 SEMKO 250V 3.15A SLO
8	VR101, 102	613-002F	VR, SEMI-FIXED SR19R-10KB 10D
9		561-009D	CONNECTOR MALE, 4PIN
10		564-022A	PLUG AY, 12 PIN.
11	R125	RN101J01	R, METAL FILM 100-J1/2WP
12	R132, 133	RS102K07	R, METAL, OXIDE 1K–K 2WP
13	R113, 114, 115 116	RSR47J01	R, METAL OXIDE 0.47-J1/2WP
14	R117, 118	RD4R7J09	R, CARBON FILM 4.7-J1/4WM
15	R123, 124	RD562J09	R, CARBON FILM 5.6K-J1/4WM
16	R105, 106	RD621J09	R, CARBON FILM 620 5% 1/4W
17	R107, 108, 119, 120, 121, 122	RD102J09	R, CARBON FILM 1K-J1/4WM
18	R101, 102	RD822J02	R, CARBON FILM 8.2K-J1/4WR
19	R109, 110	RD332J09	R, CARBON FILM 3.3K-J1/4WM
20	R126	RD472J09	R, CARBON FILM 4.7K-J1/4WM
21	R103, 104, 111, 112	RD333J09	R, CARBON FILM 33K-J1/4WM
22	R127	RD222J09	R, CARBON FILM 2.2K-J1/4WM
23	R130	RD124J09	R, CARBON FILM 120K-J1/4WM
24	R129, 131	RD154J09	R, CARBON FILM 150K-J1/4WM
25	C109, 110	CC080D06	C, CERAMIC CC 8PF-D CH 50V
26	C103, 104, 129 130	CC471J01	C, CERAMIC CC 470PF-J SL 50V
27	C111, 112	CK473Z02	C, CERAMIC CK0.047MF-Z 50V
28	C124, 125, 126, 127	CQ104J01	C, POLYESTER 0.1MF-J 50V
29	C115, 116, 117, 118	CE475D01	C, ELECTROLYTIC 4.7MF 25V
30	C105, 106	CE107D01	C, ELECTROLYTIC 100MF 25V
31	C107, 108	CE476E01	C, ELECTROLYTIC 47MF 35V
32	C101, 102	CE105F01	C, ELECTROLYTIC 1MF 50V
33	C113, 114, 120	CE106F01	C, ELECTROLYTIC 10MF 50V
34	C119, 122	CE107F01	C, ELECTROLYTIC 100MF 50V
35	C123	CE478E12	C, ELECTROLYTIC 4700MF-35V
36	C121	CE227B01	C, ELECTROLYTIC 220MF 10V
37	FOR POWER IC	255-073B	PLATE HEAT SINK (A)
38	FOR REGULATOR	25-610A	PLATE, HEAT SINK (B)
39	TR101	662-025A	TRANSISTOR, MOTOROLA, MPS9434G
40	TR102, 103	662-024F	TRANSISTOR MOTUROLA MPS9630K
41	D102, 103	652-005A	DIODE RECT 1N4001 G, I
42	C201, 202	639-602H	COIL PEAKING 5.6MH
43	C131, 132, 133, 134	CC201J01	C, CERAMIC CC 200PF-J SL 50V
44		636-403A	COIL CHOKE

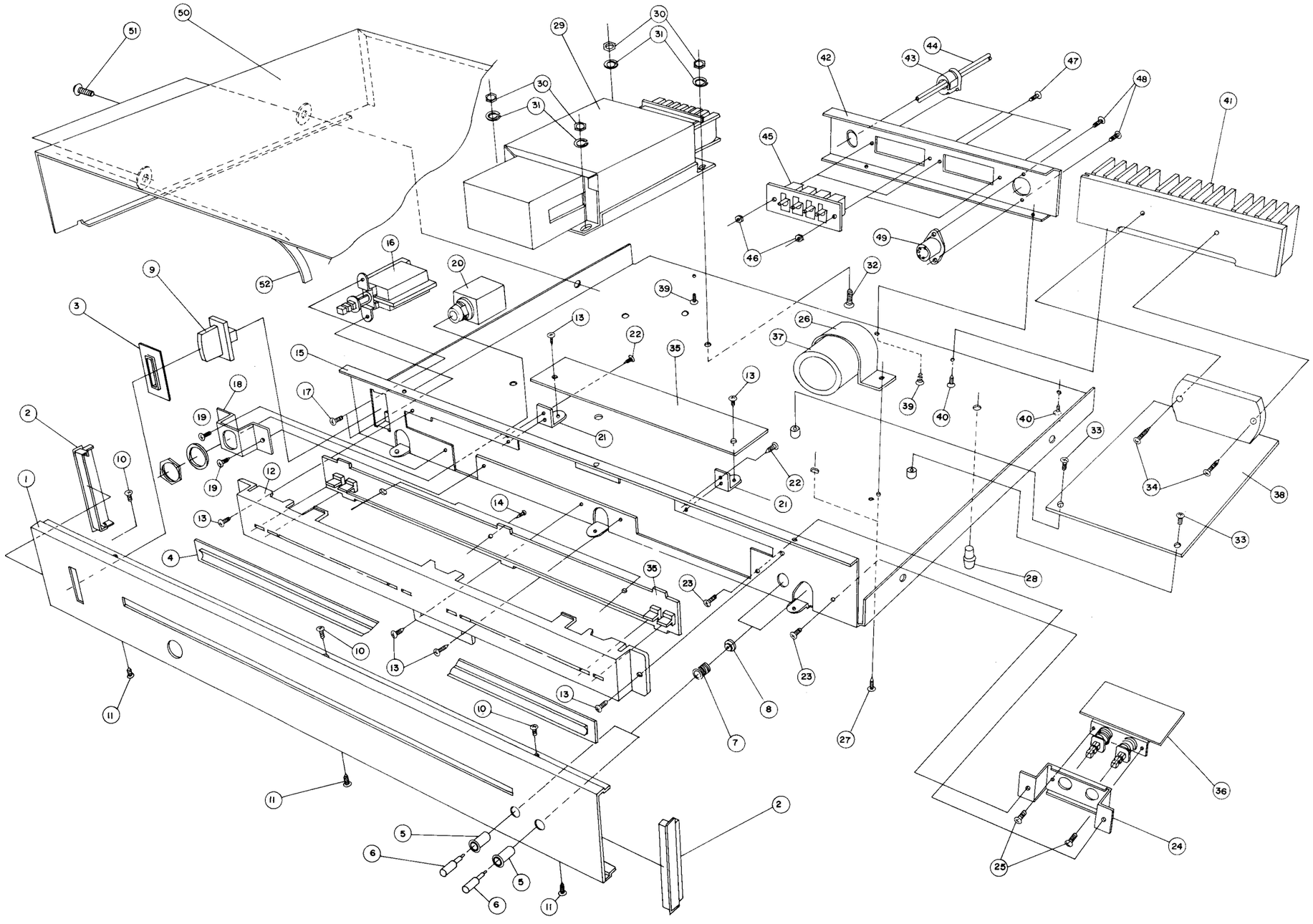
LEVEL METER PWB AY (511-498A)

NO.	SYMBOL NO.	PART NO.	DESCRIPTION
1	IC201, 202	668-133A	IC IR2431 (LED DRIVER)
2		563-614F	CONNECTOR AY MOLEX 4P
3		653-402B	LED SENIOR SE-6611-H GN
4		653-402A	LED SENIOR SE-6611-H RD
5	R201	RD222J09	R, CARBON FILM 2.2K-J1/4WM
6	R202	RD123J09	R, CARBON FILM 12K-J1/4WM
7	R203, 204	RD823J09	R, CARBON FILM 82K-J1/4WM

SP SELECTOR SW PWB AY (511-499A)

NO.	SYMBOL NO.	PART NO.	DESCRIPTION
1		554-606G	SW, PUSH SUF24N 2Cx4
2		RS221J07	R, METAL OXIDE 5% 2W 220

EXPLODED VIEW FOR CABINET



PARTS LIST FOR CABINET EXPLODED VIEW

This parts list is only applicable to Gold Star standard.
Be sure that all parts No's are subject to change according to regional characteristic.

NO.	PART NO.	DESCRIPTION	NO.	PART NO.	DESCRIPTION
1	258-400A	PANEL, FRONT	41	255-073A	PLATE HEAT SICK
2	276-067A	SIDE CAP (L) (R)	42	256-399C	PLATE BACK (FOR RCA JACK)
3	384-050A	GUIDE POWER KNOB		256-414A	PLATE BACK (FOR DIN JACK)
4	463-007A	LENS, LED	43	324-348A	HOLDER, CORD HET CO
5	384-048A	GUIDE, PUSH KNOB	44	681-003D	CORD POWER
6	273-308A	KNOB, PUSH	45	561-002A	CONNECTOR, SPEAKER
7	442-634F	SPRING KNOB	46	NHA1800J	NUT, NHA-3.0
8	334-049A	STOPPER SPRING	47	MRC1830I	SCREW
9	273-309A	KNOB, POWER	48	TRQ1839I	SCREW
10	MCC1822J	SCREW MCC+3x4	49	573-047A	SOCKET AY, RCA TYPE
11	MRC1830J	SCREW		573-039A	SOCKET DIN
12	219-036A	HOUSING LED	50	213-191C	CABINET
13	TRQ1830J	SCREW TRQ2+3x6	51	353-027G	SPECIAL SCREW
14	TRQ1530J	SCREW TRQ2x6x6	52	472-604B	FELT
15	313-192E	CHASSIS MAIN			
16	554-610A	SW, POWER DPST 70294			
17	MRC1830J	SCREW			
18	321-474A	BRACKET, JACK			
19	TRQ1830J	SCREW, TRQ 2+3x6			
20	572-602A	JACK, PHONE			
21	321-486A	BRACKET PWB			
22	TRQ1822J	SCREW TRQ2+3x4			
23	TRQ1830J	SCREW TRQ2+3x6			
24	321-475A	BRACKET, SPEAKER S/W			
25	MRC1830J	SCREW			
26	328-600A	BAND, CONDENSER			
27	TRQ1836J	SCREW TRQ2+3x8			
28	265-003A	FOOT, RUBBER			
29	641-642F	POWER TRANS (FOR 220V)			
30	NHA2200J	NUT NHA-4.0			
31	WSB22000	WASHER, SPRING			
32	MRC2243J	SCREW			
33	MRC1822J	SCREW			
34	TRQ1843I	SCREW			
35	511-498A	PWB AY LEVEL METER			
36	511-499A	PWB AY SP			
37					
38	511-497A	PWB AY MAIN AMP			
39	TRQ1830J	SCREW			
40	TRQ1836J	SCREW			

MEMO